Actuarial Memorandum and Certification

General Information

Company Identifying Information:
- Company Legal Name: HPHC Insurance Company
- State: Maine
- HIOS Issuer ID: 11593
- Market: Individual/Non-group
- Effective Date: January 1st 2017

Company Contact Information:
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Proposed Rate Increase(s)

Reason for Rate Increase(s):
Harvard Pilgrim is filing updated rates for the one PPO off exchange plan offered in 2017 under our HPIC license. This plan has been modified to comply with the bronze level value in the AV calculator. The average rate increase for the members renewing this plan is 24.4%.

There are three key drivers in the 2017 rate increases. Medical cost trend of 9.5% reflects anticipated increases in both unit cost and use of services for inpatient, and outpatient settings. Pharmacy trend for 2017 is a significant component of the overall medical trend as the impact of new high cost specialty drugs continues to drive up pharmacy costs.

For the past three years, the individual market has benefited from the Federal Reinsurance program. In 2016, HPHC individual rates were reduced by 5.8% for expected reinsurance recoveries. With this program ending in 2016, this adjustment is no longer applicable and therefore the rate increases are higher in 2017.

HPHC expects to see higher morbidity in the individual market than estimated for 2016. While HPHC's actual 2015 individual experience is not credible, the overall market experienced higher claims than anticipated. HPHC expects this higher morbidity level to continue through 2017. The increase in the morbidity factor accounts for the remainder of the rate increase. See below for details on the assumptions used in the development of the 2017 Individual rates.

Experience Period Premium and Claims

Harvard Pilgrim has only limited experience in the Individual market for calendar 2015. The experience for these members is not credible, and is shown in the experience section of the URRT with a 0% credibility assigned to the experience.

Premiums (net of MLR Rebate) in Experience Period:
Earned premium during calendar year 2015 is based on premium billed to ME Individuals for coverage during the experience period. Billed premium was retrieved from HPHC's data warehouse where premium is stored at the subscriber level for each month of coverage. HPIC did not pay an MLR rebate in ME for calendar year 2014, and will not pay an MLR rebate for calendar year 2015.

Allowed and Incurred Claims Incurred During the Experience Period:
The claims data for the experience period was retrieved from the Harvard Pilgrim data warehouse which captures paid claims, member cost sharing, and paid amounts for each claims record. Allowed claims shown in Worksheet 1 were calculated by adding claims amounts paid by HPHC and member cost sharing.

Liabilities for incurred but not reported claims, as well as liabilities for reported but unpaid claims (collectively unpaid claims liability (UCL)), are estimated using the traditional Loss Development Method. This method (generically called a reserve model) is based on the assumption that, for a given date-of-service, future claim payments will emerge in a pattern similar to that indicated by past experience. By using the Loss Development Method to project ultimate incurred claims from historic paid claims data, a preliminary liability estimate is determined as the difference between the projected ultimate incurred claims estimate and the claims paid to date.

Further refinement is made to adjust for factors that could impact the expected claims emergence pattern as compared to the pattern in the underlying data. This would include changes in claims processing practices and backlog, provider billing practices, mail and suspended claims variability, atypical levels of known high cost claims, seasonal variations, as well as actual to expected changes in the cost and use of health insurance services. Also, because of the high volatility of paid versus ultimate incurred claim relationships for the less credible months immediately preceding the valuation date, the results of the reserve model described above are compared to trended per member per month costs to ensure that the results produced appear reasonable relative to emerging experience.

The claims used to develop the completion factors reflect the experience period claims for the information submitted.

Benefit Categories

Services were mapped into the different benefit categories in section II of Worksheet 1 according to the following definitions:

***Inpatient Hospital*:** Includes non-capitated facility services for medical, surgical, maternity, skilled nursing, and other services provided in an inpatient facility setting and billed by the facility.

***Outpatient Hospital*:** Includes non-capitated facility services for surgery, emergency room, lab, radiology, therapy, observation and other services provided in an outpatient facility setting and billed by the facility.

***Professional*:** Includes non-capitated primary care, specialist, therapy, the professional component of laboratory and radiology, and other professional services, other than hospital based professionals whose payments are included in facility fees.

***Other Medical*:** Includes non-capitated ambulance, home health care, DME, prosthetics, supplies, vision exams, dental services and other services.

***Capitation*:** Includes all services provided under one or more capitated arrangements. This includes mental health services.

Prescription Drug: Includes drugs dispensed by a pharmacy net of rebates received from drug manufacturers.

Credibility Manual Rate Development

To develop the rates for the 2017 Individual portfolio we started with our small group claims experience for calendar year 2015 with two months of run out, and applied IBNR factors derived as explained above to complete the claims for the experience period. The claims were trended to the rating period using an annualized trend of 9.5%. The claims were also adjusted for Rx Rebates, and the impact of changes to the Rx formulary made in 2015, which is not yet fully in the experience period claims. This is a credible book of business, but requires several adjustments to reflect the expected experience in the Individual pool. The development of the base rate is shown in Table 6 with the adjustments made to the claims detailed below.

Projection Factors

Changes in the Morbidity of the Population Insured: An adjustment of 1.134 was applied to reflect the increased risk morbidity based on the fact that insurance decisions are made at the individual rather than the group level. To estimate this factor for the Individual market HPHC calculated the difference between the 2014 and 2015 calendar year claims for groups of size 1-4 versus all of the Small Group pool.

A second adjustment of 1.027 was included for the induced utilization for the expected individual market population in 2017. Then, to account for the mix of HMO and PPO in the experience a factor of 0.984 was applied.

For the PPO product a load of 10% is added to the rate calculation to reflect the higher expected claims level of the PPO product relative to the HMO products in the individual market.

Changes in Benefits:

The following adjustments were made to reflect expected changes in the population in the projection period:

1. New state and Federal mandates – Effective 1/1/16 Autism ABA treatment was extended to all ages. The full impact of this change is not in the experience period and has been added to reflect the coverage of these services in 2017.
2. Capitated benefits: Mental Health benefits are provided through a capitation arrangement with United Health and are not included in the base claims experience. The cost of this arrangement is added as a separate line item in the rate development
3. Pediatric Dental coverage is provided through a capitation arrangement with United Health and is not reflected in the claims experience. The PMPM cost for pediatric dental is 1.63.

No benefits have been removed as a result of the implementation of the Essential Health benefits plans

Changes in Demographics:
The experience was adjusted to reflect expected differences in the average age, and area between the small group experience and the individual market, and for the impact of tobacco rating.

Trend Factors (cost/utilization):
At Harvard Pilgrim, we develop our pricing trend every quarter based on clinical information, measurements/forecasts of historic/future trend drivers, and known provider contract or policy changes. First, we estimate the actual trend (PMPM) and components (utilization and change in severity) from our historical data by detailed service category, paying careful attention to control for non-trend items such as benefit, aging, seasonality, and outlier claims. Utilization and change in severity are projected using statistical forecasts which are then validated with clinical insight and actuarial expertise. Second, we develop a unit cost projection that is based on best estimates of known and expected increases by provider, and then we aggregate increases based on historical volume. Third, based on the most recent claims data, we model the changes in trend components to the next rating periods (for example, clinical and prescription drug policy changes). Finally, we check the aggregated results (by trend component and claim category) against our PMPM-based trend forecast, local competitors, and various regional and national benchmarks to ensure the reasonableness of final trend.

Credibility of Experience
100% credibility is given to the Credibility Manual Rate.

Paid to Allowed Ratio
The paid to allowed ratio for the projection period reflects the paid to allowed ratio of the plans to be offered in 2017. The paid to allowed ratio for each plan is based on HPHC's in house pricing model which takes into account the cost and utilization patterns seen in our experience so will differ from the AV calculator values. Table 5 shows the derivation of the paid to allowed ratio using an assumed distribution of membership.

Risk Adjustment and Reinsurance

Projected Risk Adjustments PMPM:
HPHC is assuming a factor of 1.00 for risk adjustment. At this time, HPHC does not have enough data to determine if the risk of its population in 2017 will be better or worse than the market. While HPHC received a risk adjustment payment in 2014 and expects to receive again in 2015, the membership in 2016 is significantly greater than the 2015 membership. This 2016 membership is expected to be similar to the market average risk.

Projected ACA Reinsurance Recoveries Net of Reinsurance Premium (Individual Market and Combined Markets Only):
The reinsurance program will not be active in 2017.

Non-Benefit Expenses and Contribution to Surplus

Administrative Expense Load:

The estimate for non benefit expenses were derived from our 2016 budgeted administrative costs on a PMPM basis. The 2016 budget was determined based on historical data adjusted for anticipated 2016 business changes. Our corporate expenses are allocated to products, state and legal entities based on membership. The 2016 budgeted PMPM was then applied to the most recent forecasted membership to derive a total projected administrative cost for 2017. Table 4 shows the calculation of the administrative expense load as well as the taxes and fees.

Contribution to Surplus:

HPHC is including 1% in the rates for contribution to surplus for the Individual plans offered in 2017.

Taxes and Fees:

The taxes and fees included in the rates are shown in Table 4. Where applicable these amounts have been prorated to reflect calendar year changes as they impact the months within the policy year.

Projected Loss Ratio

The projected Medical Loss Ratio using the federally prescribed MLR methodology is 85.1%.

Index Rate

A small adjustment of 0.998 was made to adjust the allowed claims in the experience period to the index rate for the experience period. These adjustments account for benefits covered in the experience period that are not part of the EHB benefits.
The index rate for the projection period is the projected allowed PMPM adjusted by a factor of 0.998.

Market Adjusted Index Rate

The market adjusted index rate reflects the impact of Risk Adjustment and Exchange user fees.

Plan Adjusted Index Rates

The derivation of the Plan Adjusted Index rates from the Market Adjusted Index rate is shown in the URRT Supplement template. The Market Adjusted Index rate is adjusted by the plan benefit factor, an adjustment for benefits in addition to EHB, and the tobacco use factor.

A tobacco use rating factor of 1.207 will be applicable in 2017. This is the same factor used for 2016 rates. In applying the tobacco use factor we have assumed tobacco users represent 5% of the membership. A factor of 0.989 is used to adjust to the non-tobacco user premium level.
Finally, administrative costs, taxes and fees are added to arrive at the Plan Adjusted rate for each plan. These rates are included in URRT page 2 section IV and the URRT Supplement template.

Calibration

Age factors are the default factors adopted by the state of Maine. To calculate the adjustment to the plan adjusted index rate, the average age factor is calculated separately for each month in the

experience period. Every member's age as of the 15th is mapped to the rating factor table and a weighted average is taken. To calculate the average factor for the entire period, a member-weighted average of each of the 12 months is calculated. The average age factor is applied uniformly to the Plan Adjusted Index Rates for all plans.
The weighted average age factor for the experience period is 1.554. The resulting average member age in our experience period, rounded to a whole number, is 47.

The area factors have been updated for 2017 based on experience and are shown in Table 3. The range of area factors complies with the required 1.5:1 ratio.

The Plan Adjusted Index rate is calibrated by dividing by the weighted average age and area factors. The resulting rate is used to calculate the Consumer Adjusted Premium.

Consumer adjusted premium rate development

The HPHC calculation starts with the appropriate calibrated plan adjusted index rate. The appropriate area factor and age factor for each subscriber is applied to this rate. The total premium for the subscriber is calculated by summing all of these premiums, with a maximum of three dependents (under 18) included for families.

AV Metal Values

The Actuarial Value Calculator was used to determine the metal tiers for the 2017 EHB plans. Adjustments were made to the AV calculator inputs to account for benefit designs not reflected in the AV calculator. The adjustments were derived by determining an actuarial equivalent benefit that could be used as input in the AV calculator. The adjustments made to each plan are documented in the attached certification documents.

AV Pricing Values

We rely on our benefit plan pricing model (which relies on the Milliman model as its core) to calculate the actuarial value of benefits for each benefit plan. The actuarial value of the benefits depends solely on the plan's design details, such as benefit limits and cost-sharing attributes (levels of copays, deductibles, and coinsurance). It does not incorporate the claims experience or risk profile of the members who actually select the benefit plan. Rather, it assumes the same risk profile for all the benefit plans, and thereby highlights the differences solely based on plan design. The benefit level factors are consistent with actuarial values of the benefit plans, measured on the basis of a census that is representative of our Massachusetts business. Our estimate of the actuarial value of a benefit plan may change over time, as we re-analyze the discouraging effect of cost-sharing on utilization, as well as the impact of leveraging due to the fixed cost-sharing attributes. We also pay attention to industry standards and competitor actions to monitor these impacts and incorporate this information into our calculation of the benefit level adjustment. Once we determine that the benefit level adjustment needs to be revised, we would phase in the changes annually in order to avoid significant market disruptions.

Membership Projections

The expected membership as shown in the URRT is based on current enrollment by plan.

Terminated Products

No plans are being terminated in 2017

Plan Type N/A

Warning Alerts

There is one warning that appears on WS 2 of the URRT on row 57, the Experience period premium. This number does not tie out to the total premium on WS1 due to differences in the membership by plan and demographics assumed in setting the 2015 rates.

Actuarial Certification

I, Laura Pendergast, am a member in good standing of the American Academy of Actuaries. To the best of my knowledge, the projected index rate was developed in compliance with all applicable Actuarial Standards of Practice and State and Federal Statutes and Regulations (45 CFR 156.80(d)(1)), and is neither excessive nor deficient. Plan level rates were generated using only the index rates and the allowable modifiers as described in 45 CFR 156.80(d)(1) and 45 CFR 156.80(d)(2), and the percent of total premium that represents essential health benefits included in Worksheet 2, Sections III and IV were calculated in accordance with actuarial standards of practice.

Please note that Part I of the Unified Rate Review Template does not demonstrate the process used by Harvard Pilgrim Health Care Inc. to develop the rates. Rather it represents information required by Federal regulation to be provided in support of the review of rate increases.

The AV Calculator was used to determine the AV Metal Values shown in Worksheet 2 of the Part I Unified Rate Review Template for all plans. However, some plans required additional adjustments. An actuarial certification is included for all of the plans that required additional adjustments.

Please note that the rates in this filing reflect the information that HPHC had as of April, 2016, regarding 2017 market conditions. HPHC reserves the right to withdraw or revise these rates when additional HPHC experience becomes available, with the release of the 2015 risk adjustment report, if there is a significant change in market conditions, or if there are changes in state or federal law.

Actuary Printed Name: Laura Pendergast
Date: 5/10/2016